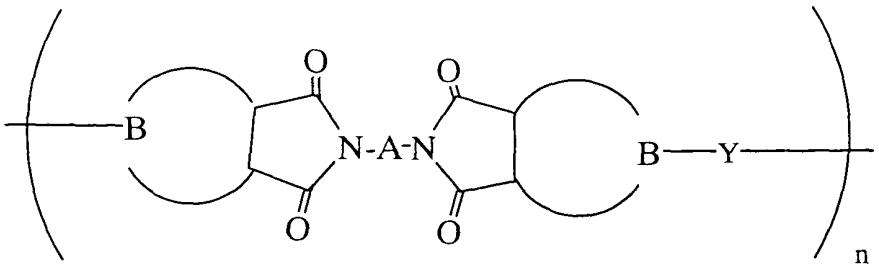
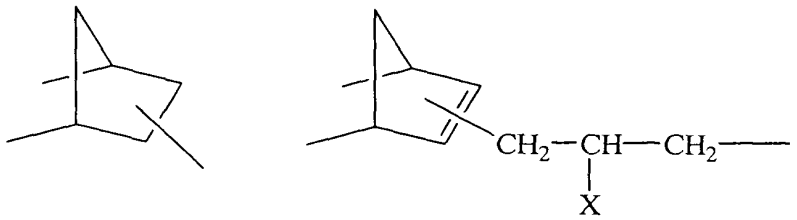
What Is Claimed Is:

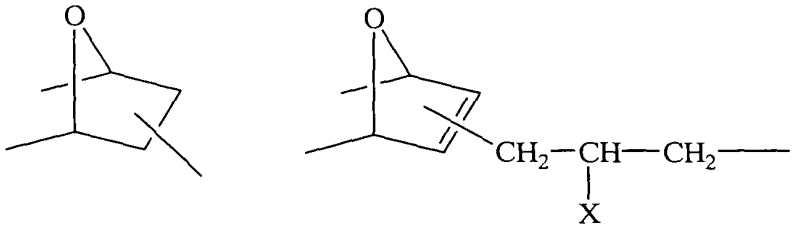
1. An imide silicone resin with a structure represented by a general formula (1) shown below:

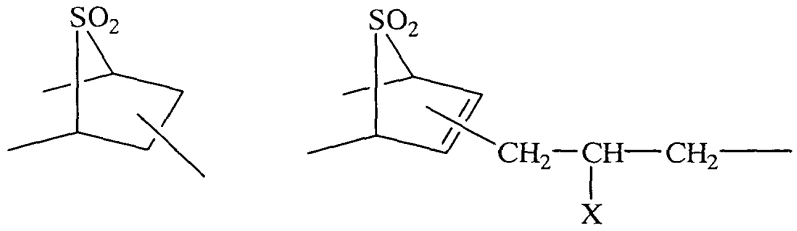


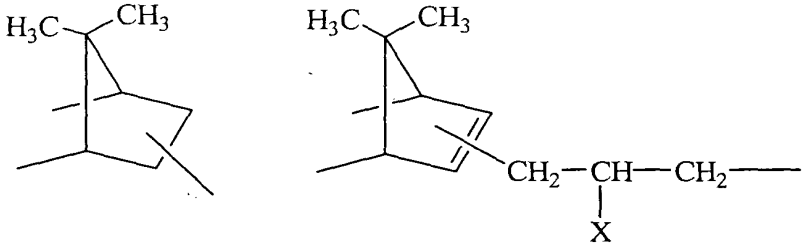
(1)

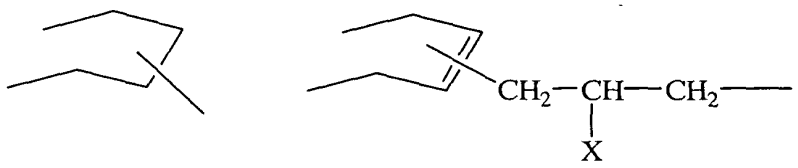
[wherein, each A is a bivalent organic group, each B represents, independently, a trivalent group selected from groups having the formulas shown below, in which two single bonds protruding in a substantially identical direction are bonded to an imide ring to form a ring structure and the third single bond is bonded to Y, Y is a bivalent group represented by a general formula (2) shown below, and n is an integer from 2 to 100:

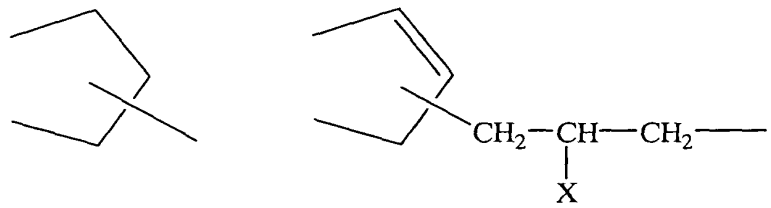




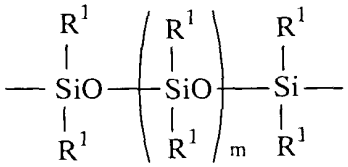








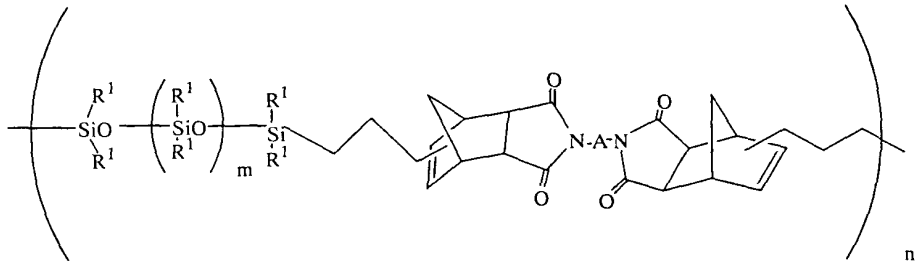
(wherein in each formula, X represents a hydrogen atom or a methyl group),



(2)

(wherein, each R^1 represents, independently, a monovalent organic group, and m is an integer from 0 to 100)].

2. The imide silicone resin according to claim 1, with a structure represented by a general formula (3) shown below:



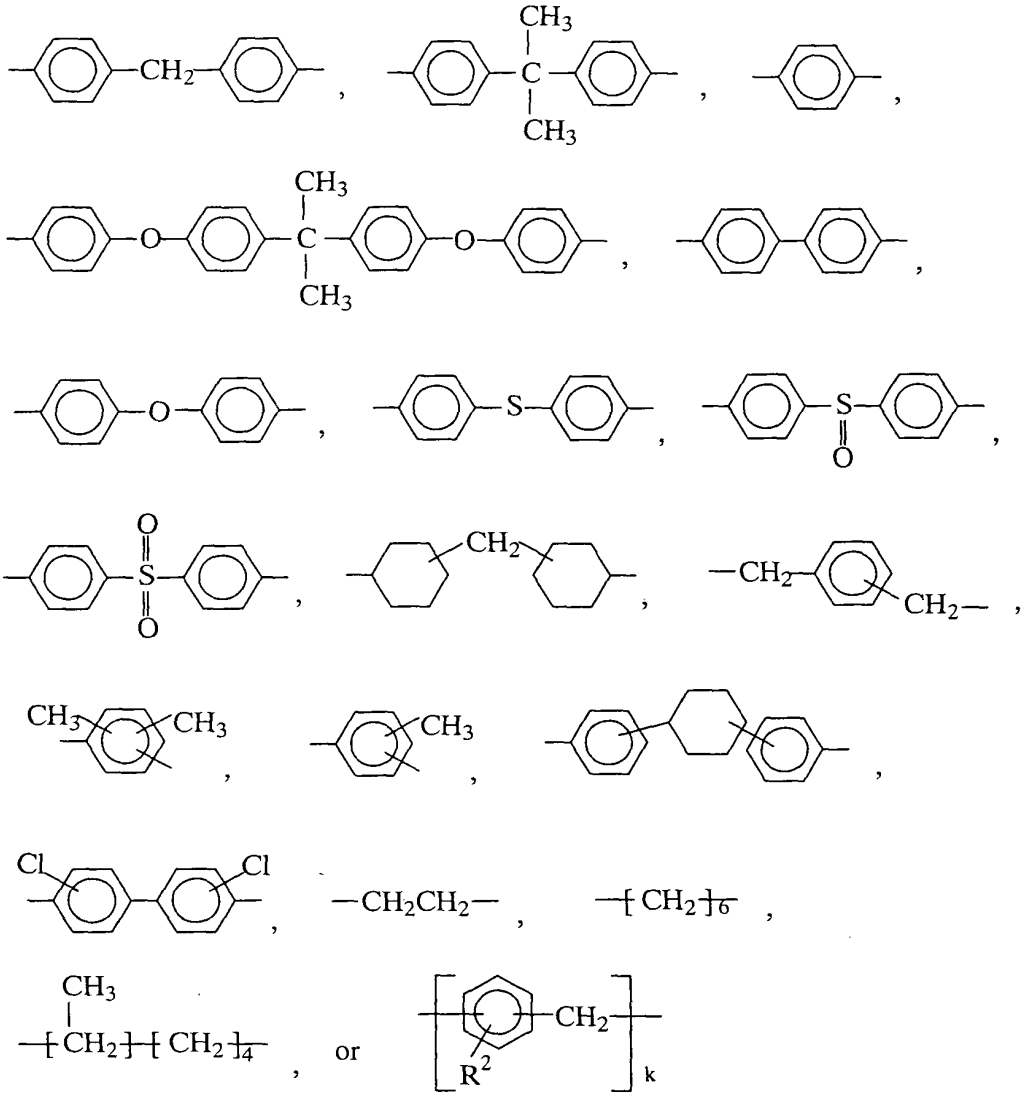
(3)

(wherein, R^1, A, m, and n are as defined above).

3. The imide silicone resin according to claim 1, wherein said n is an integer from 3 to 70.

4. The imide silicone resin according to claim 1, wherein said m is an integer from 0 to 60.

5. The imide silicone resin according to claim 1, wherein each A is represented by the formula:



(wherein, R^2 represents an unsubstituted or substituted monovalent hydrocarbon group of 1 to 10 carbon atoms, and k is an integer from 1 to 20).

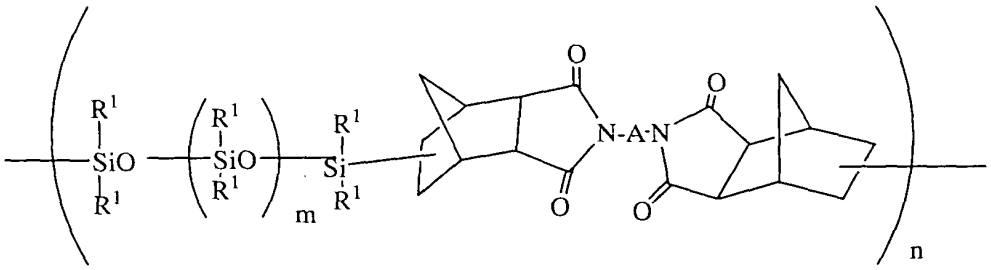
6. The imide silicone resin according to claim 5, wherein said R^2 represents an unsubstituted or substituted monovalent hydrocarbon group of 1 to 6 carbon atoms.

7. The imide silicone resin according to claim 5, wherein said k is an integer from 1 to 10.

8. The imide silicone resin according to claim 1, wherein said R^1 represents an unsubstituted or substituted monovalent hydrocarbon group of 1 to 12 carbon atoms.

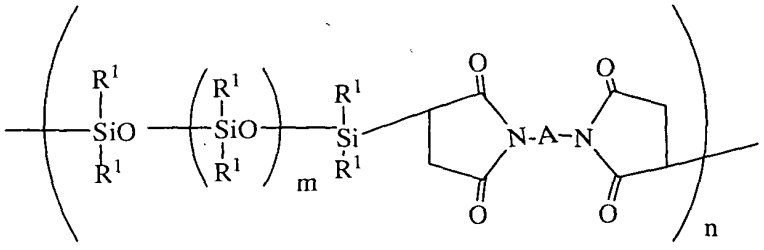
9. The imide silicone resin according to claim 1, wherein said R^1 represents an unsubstituted or substituted monovalent hydrocarbon group of 1 to 8 carbon atoms.

10. The imide silicone resin according to claim 1, with a structure represented by a general formula shown below:



(wherein, R^1, A, m, and n are as defined above).

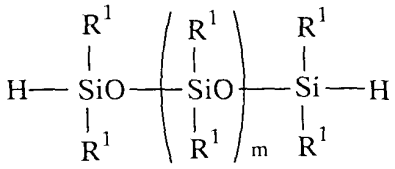
11. An imide silicone resin with a structure represented by a general formula shown below:



(wherein, each R^1 represents, independently, a monovalent organic group, A is a bivalent organic group, m is an integer from 0 to 100, and n is an integer from 2 to 100).

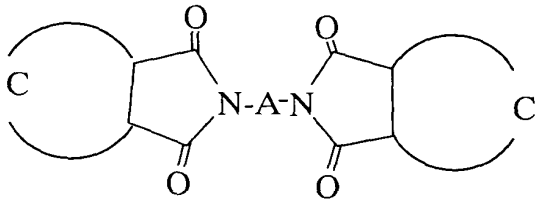
12. A production process for the imide silicone resin according to claim 1, comprising:

subjecting an organopolysiloxane represented by a general formula (4) shown below and an imide compound represented by a general formula (5) shown below to an addition reaction:



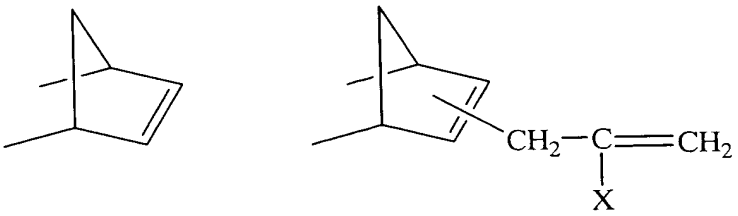
(4)

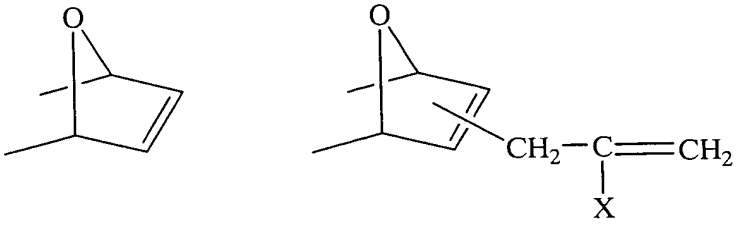
(wherein, each R^1 represents, independently, a monovalent organic group, and m is an integer from 0 to 100),

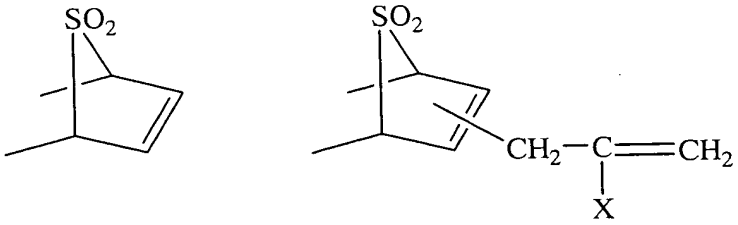


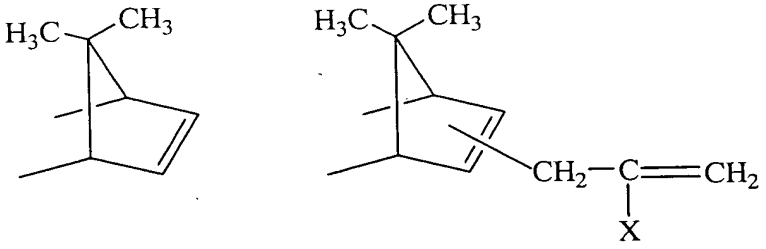
(5)

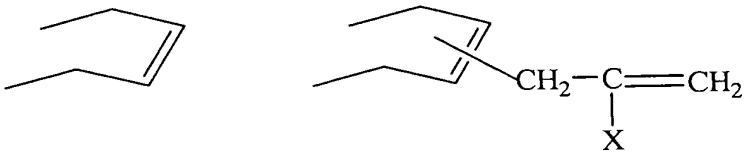
[wherein, A is a bivalent organic group, and each C represents, independently, a bivalent group selected from groups shown below:

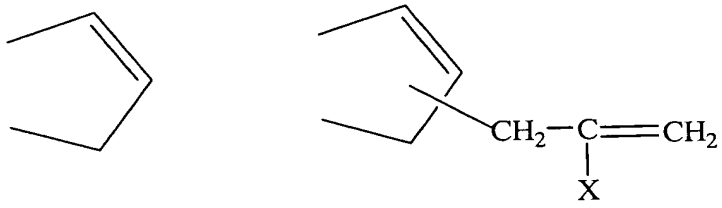






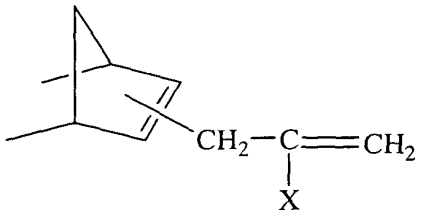






(wherein, X represents a hydrogen atom or a methyl group)].

13. The production process according to claim 12, wherein in said imide compound represented by said general formula (5), said C is a bivalent group represented by a formula shown below:

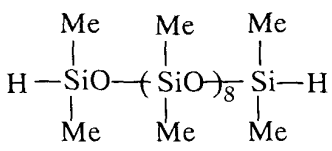
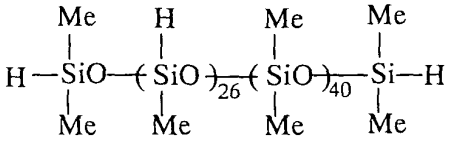


(wherein, X is as defined above).

14. The production process according to claim 12, wherein said m is an integer from 0 to 60.

15. The production process according to claim 12, wherein said organopolysiloxane is a dimethylpolysiloxane with both molecular chain terminals blocked with dimethylhydrogensiloxy groups, a copolymer of dimethylsiloxane and methylphenylsiloxane with both molecular chain terminals blocked with dimethylhydrogensiloxy groups, a methylphenylpolysiloxane with both molecular chain terminals blocked with dimethylhydrogensiloxy groups, or a mixture of two or more thereof.

16. The production process according to claim 12, wherein said organopolysiloxane is:


,

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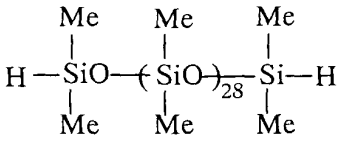
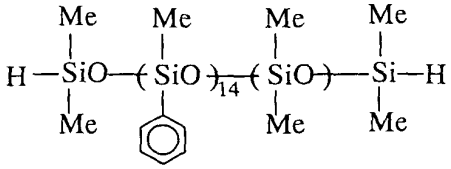
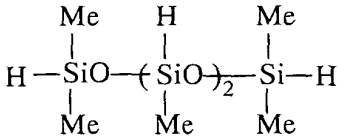
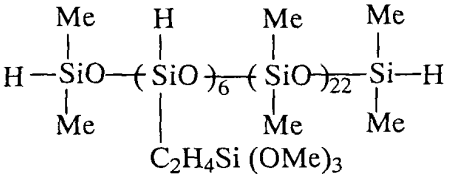
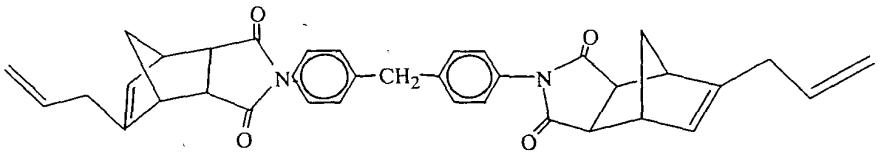
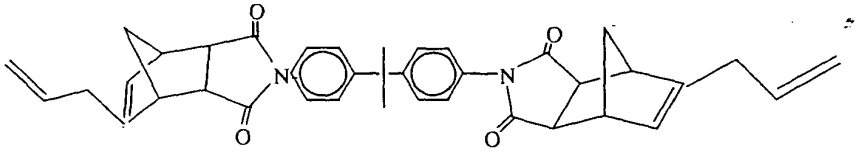

,

,

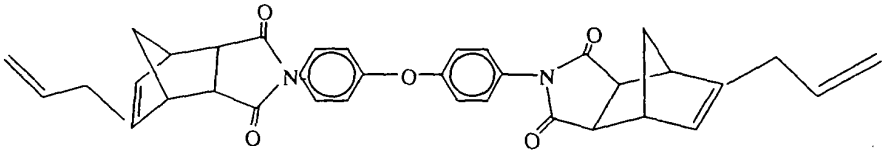

, or


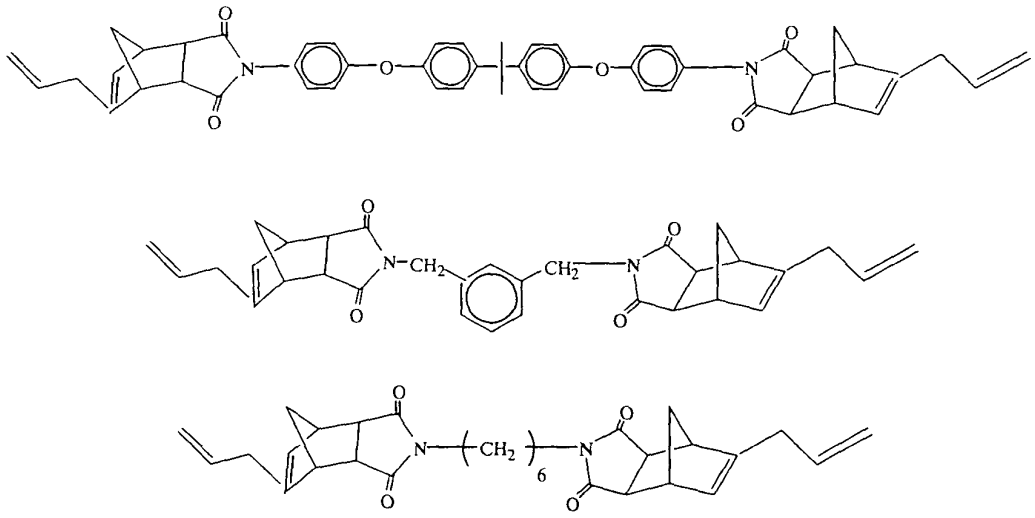
(wherein in the formulas Me represents a methyl group).

17. The production process according to claim 12, wherein said imide compound comprises at least one compound shown below:



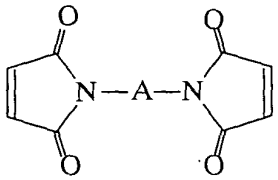




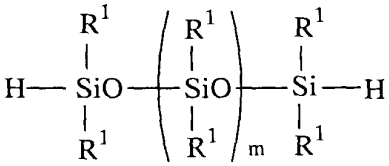


18. A production process for the imide silicone resin according to claim 11, comprising:

subjecting an organopolysiloxane represented by a general formula (4) shown below and an imide compound represented by a general formula shown below to an addition reaction:



(wherein, A is a bivalent organic group),



(4)

(wherein, each R^1 represents, independently, a monovalent organic group, and m is an integer from 0 to 100).

19. A cured resin coating formed by curing an imide silicone resin according to claim 1.